Northern Exposure
A Ph.D.’s Transit from L.A. to Berkeley to Ann Arbor

By Lisa Harrington

There’s no place like home. For Christina Smolke, home is Southern California. Before moving north for graduate school, she knew little about the Bay Area. “There’s so much energy here,” she says.

Smolke graduated summa cum laude from Berkeley in 2001 with a Ph.D. in chemical engineering. Once she completes a two-year postdoc in the Department of Molecular and Cell Biology, she will head to Ann Arbor to become an assistant professor at Michigan.

Refreshingly down to earth and enthusiastic about life, Smolke shatters the myth that, in order to excel, graduate students need to isolate themselves from the mainstream. On the contrary, she’s made a concerted effort to balance her teaching and research with activities beyond the classroom and lab.

“I love Northern California. I love the weather,” says Smolke. “I enjoy the natural beauty of the area by hiking, camping, visiting the wine country, canoeing, and rafting.” Her favorite places off campus are Yosemite National Park and Point Reyes National Seashore.

Graduate school, says Smolke, “involves a lot of time indoors writing and a lot of bench work.” Being able to get out and stretch her legs or work out gave her time to think. To stay in shape, she took belly dancing classes in Albany with friends and recently became part of the professional troupe.

Smolke completed her undergraduate work in chemical engineering, with an emphasis in biology, at USC. She graduated summa cum laude in 1997. At USC, she found herself “a little overwhelmed” when she decided to major in engineering. Never the engineering type in high school, she says she was better known for writing and drama and had once considered pursuing an acting career. It took effort and determination to switch gears.

“I developed tunnel vision and didn’t have many outside activities as an undergrad,” Smolke recalls. “I did really well and got into Berkeley, so I can’t complain, but I realized how much I was missing. At Berkeley, I’ve found so many opportunities to get involved.” She even found time to take a few classes in other departments, something she strongly recommends.

The middle child in a close-knit family of five, Smolke grew up in “the beach communities surrounding L.A.” Her younger brother is a graduate student in engineering at UC Irvine, and her older sister is a quality-control manager at a Japanese noodle company. “Whenever I go home, there are tons of Japanese noodles to try,” says Smolke.

Research That Matters
During her graduate career, Smolke worked as a research assistant in the Keasling Lab in the Department of Chemical Engineering, learning how to manipulate bacteria for pharmaceutical applications.

“Christina is one of the best graduate students with whom I have ever worked,” says her adviser, Professor Jay D. Keasling. “She was a model student. She kept up with the literature, thought about what she was doing, worked very hard, and was extremely...”

See Smolke, page 16
Dear Graduate Community,

Since I became Dean 18 months ago, I have enjoyed a global view of graduate education at Berkeley. With 105 departments, schools, and groups that grant degrees, the University offers the widest selection of graduate degrees in this universe. According to the National Research Council, Berkeley can boast of more top-ranked departments than any other university.

Although your days have been undoubtedly full with course work, lab work, and research, I encourage you to venture outside your department, if you haven’t already explored. Go to a lecture, take a course, meet a professor from outside your discipline. Talk to students from different fields. Join a working group—share and exchange ideas across departments.

And while you’re making an effort to get out more, we’ll make an effort to bring great scholars from around the world to you. This spring we hosted Noam Chomsky, one of the world’s most distinguished linguists and a vocal political activist, and Craig Venter, the controversial scientist who broke the genome code. Anthony Giddings, the political architect of the Labor Government in England, also came to campus and discussed the implications of globalization.

Look for announcements in eGrad, The Graduate, and on our Web site (www.grad.berkeley.edu) for what promise to be exciting events in the fall. It’s time to go global!

Mary Ann Mason
Dean of the Graduate Division

Grad Notes

Reason to Smile

Dental coverage will be part of the Student Health Insurance Plan (SHIP) this fall. Graduate students enrolled in SHIP will be covered for preventive and general restorative dental care. The dental plan will result in a modest increase in SHIP premiums to $278 per semester. For a full explanation of SHIP’s major medical, mental health, and dental benefits, please visit the University Health Services Web site (http://www.uhs.berkeley.edu).

GSIs, Acting Instructors, Readers, and Tutors

Would you like to apply for an academic appointment? UC Berkeley employs more than 2,000 Academic Student Employees (ASE) each academic term. The conditions of employment for ASEs are described on the Human Resources Web site (http://hrweb.berkeley.edu/labor/ase.htm). If you’re interested in becoming a GSI, an Acting Instructor, Reader, or Tutor, please check the list of projected ASE positions online (http://hrweb.berkeley.edu/labor/asejobs.htm). For further information, visit the Graduate Division Web site (http://www.grad.berkeley.edu/appointments/index.shtml).

Have Issues?

Please send questions, comments, and suggestions concerning The Graduate and other Graduate Division publications to Lisa Harrington, editor, at gradpub@uclink.berkeley.edu.

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Admissions Increase for Fall 2002
By Claudine Zap

Last fall, Michele Rabin, director of admissions for the Graduate School of Journalism, sensed a change when the school opened its doors to interested applicants as it does every year. “We usually have 50 or 60 people come to Prospectives Day,” says Rabin. This time, 180 people showed up. In addition to the shortage of boxed lunches and chairs, Rabin’s office was equally unprepared for a deluge of 441 applications, a 44 percent increase over last year, and the highest number of applicants in the history of the school.

Graduate admission offices all over campus, from art to neurosciences to business, saw a surge in applicants. What would explain the renewed appeal of graduate school? “Certainly, it’s a result of the economy,” notes Jett Pihakis, of the Haas School of Business, which experienced a 37 percent increase in applications—the most ever in a single year.

“We’ve experienced an increase in the numbers of graduate applicants across the board this year,” notes Joseph J. Duggan, associate dean for graduate admissions. Schools that compete with Berkeley, such as Stanford, Harvard, MIT, Princeton, Yale, and Columbia report comparable increases. “This type of increase is not unusual in economic slow-downs,” explains Duggan. “We welcome it, because it gives us a wider range from which to choose the most interesting and most talented students.”

Nobody needs to tell this to Lauren H. Gaede, student affairs officer in the Department of Bioengineering, where there’s been a 75 percent rise in applications. “It increased the workload,” she says, noting that the entire office pitched in to help prepare applications for the faculty review committee.

Gaede adds that while the dot-com industry has tanked, bioengineering has flourished. “It’s a hot area,” she says. “People want to be part of a successful industry.”

The journalism school’s Rabin says that layoffs of Web editors and writers spurred a return to the classroom. Still, she is careful to spell out the reality of life after graduate school. Says Rabin, “We don’t guarantee employment.”

By the Numbers
So far, 25,845 have applied for graduate programs for fall 2002, compared with 20,257 applications for fall 2001—a 28 percent increase in applicants to date. Some programs that experienced an increase are:

<table>
<thead>
<tr>
<th>Program</th>
<th>Number of Applications</th>
<th>Fall 2001</th>
<th>Fall 2002</th>
<th>% increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art</td>
<td>101</td>
<td>162</td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>Bioengineering</td>
<td>177</td>
<td>312</td>
<td>77%</td>
<td></td>
</tr>
<tr>
<td>Economics</td>
<td>584</td>
<td>749</td>
<td>28%</td>
<td></td>
</tr>
<tr>
<td>Electrical Engineering &amp; Computer Sciences</td>
<td>2,067</td>
<td>3,060</td>
<td>46%</td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>367</td>
<td>482</td>
<td>31%</td>
<td></td>
</tr>
<tr>
<td>Journalism</td>
<td>306</td>
<td>441</td>
<td>44%</td>
<td></td>
</tr>
<tr>
<td>Linguistics</td>
<td>80</td>
<td>122</td>
<td>53%</td>
<td></td>
</tr>
<tr>
<td>Mechanical Engineering</td>
<td>714</td>
<td>917</td>
<td>28%</td>
<td></td>
</tr>
<tr>
<td>Neurosciences</td>
<td>75</td>
<td>108</td>
<td>44%</td>
<td></td>
</tr>
<tr>
<td>South &amp; Southeast Asian Studies</td>
<td>24</td>
<td>37</td>
<td>78%</td>
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</table>

Source: Office of the Dean, Graduate Division, May 2002.

In the News
Celebrating GSIs
More than 200 students took time out to be feted for their teaching skills at the annual Outstanding Graduate Student Instructor (OGSI) awards ceremony. Chancellor Robert M. Berdahl and Graduate Division Dean Mary Ann Mason were on hand to honor the students for their work in educating undergraduates. Martin Covington, psychology professor and surprised recipient of the Faculty Award for Outstanding Mentorship of GSIs, told graduate students, “You are an inspiration to the faculty, with your enthusiasm and your excitement.” Julie Larson, an OGSI in Linguistics, said that as she struggled with the immense challenges of teaching, she found a new perspective. “I really admire my teachers,” she said. The awards recognized 244 students out of about 3,400 GSIs who teach each semester. Factors such as classroom performance, student evaluations, and teaching portfolios are some of the things departments consider during nominations. “GSIs have a significant impact on the undergraduate education,” says Linda von Hoene, director of the GSI Teaching and Resource Center. “This is a celebration of teaching.” For a list of the award winners, visit the GSI section of the Graduate Division Web site (http://www.grad.berkeley.edu/gsi/index.shtml).

Tools for the Visually Impaired
Why would the visually impaired need to draw something they can’t see? Because they have imaginations, says Hesham Kamel, a doctoral student in electrical engineering & computer sciences who lost his own vision in a surgical accident 17 years ago. When Kamel was unable to find a suitable drawing and animation tool, he developed a software prototype, under the guidance of his adviser, James Landay, assistant professor of computer science. Kamel presented his software—Integrated Communication 2 Draw, or IC2D—at national and international conferences recently and hopes to make it commercially viable. “There’s nothing
Off Beat: Finding New Ways to Create Music

By Claudine Zap

From the street, the house at 1750 Arch looks like many others in North Berkeley—stucco with Mexican tile detailing. Slow down, though, and you may hear odd noises seeping out of open windows—deep booming sounds of traditional instruments being played into computers and manipulated, sometimes rather loudly. Is this a house of bad neighbors? No, it's merely the Center for New Music & Audio Technologies (CNMAT). If you venture inside, you'll see that a once formal dining room, with high ceilings, has been transformed into a performance space. Several rows of chairs are set up, and eight speakers are mounted on the walls for surround sound. Thick strands of wires snake around doorways and jut through walls of sound studios—high powered Mac and PC computers fill every room in the house—where keyboards and drum sets lie alongside circuit boards. The house analogy is not accidental, contends Edmund Campion, a music professor and composer in residence. Campion notes that CNMAT is filled with students around the clock. He, in fact, camps out in a cramped office dominated by a soundboard.

Although CNMAT is a brisk walk off campus and uphill from the music building and Hertz Hall, they are closely connected. CNMAT is part of the music program at Berkeley, and students interested in composition and audio technology take courses in both places.

Sounding Off

CNMAT's mission is to produce and present the interaction between music and technology. Students from various disciplines, including physics, mathematics, electrical engineering, psychology, computer science, cognitive science and music collaborate there. Scientists come to experiment with sound, and musicians use their innovations in their compositions. Campion wryly describes the results as “unpopular music or non-commercial music.” He adds, “It's a kind of research into sound and expression—a space where people come to create musical works and don't have to feel the pressure of commercial interest or stylistic constraint.”

Although commercial use may not be the intrinsic goal of the program, the tech industry is involved in the center's activities. Several Silicon Valley companies donated equipment and are interested in the musical results. As Adrian Freed, CNMAT's research director points out, “We do applied research here. Paper is not a sufficient outcome. It has to be proven in performance or composition. Closing that loop requires collaboration.”

Not That Kind of Doctor

One student who has bridged technology and traditional composition is Ali Momeni, a composer, musician, and systems administrator for CNMAT. Growing up, Momeni studied piano and played mallets for his high school’s marching band. As an undergraduate, he majored in physics, in response to his Iranian mother's wish for him to become a medical doctor, like his brother. Following a semester at a music conservatory in Australia, Momeni renewed his interest in playing and writing music. After graduation from college, he convinced his mother that he wasn’t meant to be that kind of doctor. Instead, Momeni typed “music” and “technology” into a search engine on the Web. CNMAT, one of the few places in the world to combine the two, popped up. Momeni applied to Berkeley's doctoral program in music, to combine his science background with his musical interests.

Momeni's latest project involves drum rhythms that he learned during a trip to Ghana last summer. He says the fast drumbeat in African music is a way of constructing rhythm that differs from Western music. He says, “Computers are good at keeping fast pulses. I’m trying to implement software engines that are good at playing music with this sort of timing.” His compositions reflect the African beat with what he calls the Western penchant for capturing sarcasm. Says Momeni, “It’s really witty, heay—I think it’s super cool.”

Along with drumbeats, Momeni brought back a calabash gourd, which he proceeded to turn into a high-tech instrument for his compositions. The dried-out shell looks like a cartoon version of a space helmet, with metal springs screwed into the half dome on wooden blocks that bob and weave atop the gourd. Momeni makes sounds by running his fingers along springs that...
vary in size and length, and by rubbing his fingers against the gourd. The inside of the shell acts as a resonating chamber, and two contact microphones that look like electrodes transfer the vibrations into the computer. Momeni alters the tone by changing the pitch, delaying or sustaining the sound, using software and a few clicks of a joystick.

Reflecting a trend at Berkeley, Momeni doesn’t only compose, he performs. Campion says this reflects the paradigm at CNMAT. “It’s a little different than hiring a cellist to play your piece.” He adds, “You’re the only one who understands exactly how it works, and to be successful, there has to be that intimate relationship.”

Berkeley New Music Project
While all graduate student composers have access to CNMAT for projects, not all composers use technology for their compositions. Both traditional music and new technology come together for concerts sponsored by the student-run Berkeley New Music Project. An emphasis in performance has galvanized students to organize regular performances that are free and open to the public.

Hubert Ho, a composer since age five and now a graduate student in composition, organizes the series. He views his role as an administrator, not as a dictator of taste. “I don’t want to control the aesthetic direction of anybody,” he says. “My responsibility is to avoid censorship.” In addition to giving students, faculty, and the community a chance to hear the fruition of their work, there’s a more practical side. “After we graduate, we’ll have to do everything ourselves anyway,” says Ho. “It’s a way to experience the real world—how to put on a concert, how funding works. Part of our education is that we have this experience.”

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Engineering Trio Wins $10,000
Three doctoral students, Charles Kuo and Daewon Ha, of electrical engineering and computer sciences, and Pushkar Ranade, of materials science and engineering, won a grand prize of $10,000 in Berkeley’s first Innovators’ Challenge. The trio developed a new type of semiconductor memory for hand-held devices and miniature electronics. The competition was sponsored by VERTEX, an entrepreneurship club formed by Berkeley engineering students. Twenty leaders from industry, venture capital firms, and academia evaluated 18 projects across all disciplines in the College of Engineering before choosing the winner.

Improving Women’s Health
Women in the United States have a 60 percent chance of contracting a urinary tract infection during their lifetime. Thanks to research by Amee Manges, a doctoral student in public health, that chance may soon be reduced. The results of her study, published in the New England Journal of Medicine, reveal a disturbing trend: some recurring infections are resistant to antibiotics. Although the groundbreaking study was initiated at Berkeley, Manges partnered with universities in Michigan and Minnesota to share results. UTIs have never been identified as foodborne diseases, but Manges and Lee Riley, professor of public health, suspect contaminated food as a factor. To learn more, they are applying for funding to launch a follow-up study, an in-depth project that will examine the diet and behavior of subjects and include lab work. Says Riley, “No one’s considered

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Writers at Work
Poems for Architects: Jill Stoner Blends Literature and Design

By Claudine Zap

Associate Professor of Architecture, Jill Stoner, has harbored a life-long love of poetry. With her book Poems for Architects, she manages to marry her passion with her profession. Stoner accomplishes this in her selection of poems, which are divided into four chapters. Chapters one and two encompass poems about home and the city, including selections by Wallace Stevens, Sylvia Path, and Langston Hughes. The third chapter suggests new ways of looking at space and includes poems by Adrienne Rich, T.S. Eliot, and Elizabeth Bishop. In the fourth chapter, Stoner responds graphically, as an architect, to the poetic form.

In selecting poems, Stoner limited herself to the 20th century so as not to become too overwhelmed. Some were obvious to her, poems she has enjoyed for years, such as W.H. Auden's "Down There" and "Up There," and A. A. Milne's "Halfway Down." In the fourth chapter, Stoner deconstructs the villanelle, a strict poetic structure some 300 years old. Regaining popularity in the 20th century, the form incorporates repetition and rhyming. Stoner chooses six villanelle poems and illustrates how they would appear if the poetic form became a building section, or even a city plan.

In her introductory essay "Why Poems?" Stoner writes:

Thus I suggest that we look toward poetry to help us locate and express qualities of lightness, of ephemera, and of change. To my way of thinking, this is the gift that one art can now have the pleasure of bringing to another.

One evening in the South Park gallery of William Stout Design Books, students, professors, architects, and admirers gathered to hear Stoner read from her book. Stoner's illustrations graced the walls. The crowd sampled Stoner's favorite hors d'oeuvres—prosciutto, olives, and Parmesan cheese—and listened as she recited her favorite poems. Building on the theme of her first book, Stoner plans to continue with two more in the series: Essays for Architects and Stories for Architects. A few weeks after the reading, we enjoyed a conversation with Jill Stoner at Cafe Bastille in San Francisco.

How did the idea for your book come about?
I have a background in poetry. I majored in poetry as an undergraduate. I wanted to be a poet, but one day I realized I wasn't good enough. I actually loved studying poetry and wrote a fairly ambitious thesis on Stéphane Mallarmé and Dylan Thomas at the same time that I was applying to architecture school. I never left the poetry behind. It has informed my teaching for 22 years. I do retreats with students. We do poetry writing workshops as preparation for an architecture thesis. So I've been folding it in all along.

Even though it's a book of words, the way it's constructed with drawings and photographs is very visual. How did you decide on the photos?
I originally had photographs of mine from Eastern Europe, very provocative pictures. And then I realized that this book is about reading, that I'm trying to get architects to be contemplative with words. That's what André Kertész's work is all about. It shows people hypnotized by words and taken out of whatever context they're in—a guy sitting on the steps in Venice, three little barefoot kids hypnotized by the printed page. It just seemed right.

In your book, you've illustrated poems on transparent paper and then overlaid the picture onto the poem. How did the illustrations evolve?
I had made one drawing and I was thinking about what it would be like to make more. It wasn't an evolved idea until I made my book proposal. The construction of the book distributes illustrations throughout, which makes it a stronger book.

Six Villanelles seems to be an extension of those drawings, as you...
take six poems and create buildings from their structures. It took me a long time to figure out what that last chapter was going to be, how the story it tells is different than the other three chapters. This is where we’re really reading the poem with an architect’s eye, where we really let go of the content of the poem.

How do the poems illuminate the field of architecture? Each one adds a different illumination, and the illumination depends on the reader. I hope that readers will look at ordinary things more carefully and take ordinary things more seriously. Like William Carlos Williams’ “The Red Wheelbarrow.” It’s okay to have only red wheelbarrows. We don’t need green ones and blue ones. The red one is just fine. Or the way Diana O’Hare describes the sheltering plane of the roof, the experience of moving up a stair. I think what the poets do is to see things that the rest of us have stopped seeing.

Do you have a favorite poem? Did anything strike you anew as you wrote the book? I can honestly say that after 9/11, James Merrill’s poem took on layers and layers of meaning. Even the title, “An Urban Convalescence,” is about him being sick in the city and walking around. But now you think “urban convalescence,” you think of the city being sick and that was astonishing to me. I added a footnote (to the poem) to say we read this poem differently now. So, I do think poems continue to reinvent themselves. There are poems I’ve known for 20 years that I see differently after reading them, including them in the book, and folding them into an essay.

What did you learn from this experience? I learned that writing a book is as complicated as making a building. There’s the easy part and the really hard part. By going through the hard part, I gained a certain confidence in the fact that if you work hard, it will get done and it will get better. I’m not scared any more of writing a book. This is my first book. I had written lots of articles, chapters in books, but this is my first entire book.

What was the writing process like for you? It was really hard. I had a sabbatical from school, but I didn’t have sabbatical from the (architecture) practice. At one point I went to my cousin’s place in Montana for a few days and just wrote. That was a key step in the process. I’m very insecure about writing, so I was searching for the voice that suited what I wanted to say. It was really to decide where to use first person. The essays are different. Some of the essays are first person, some not at all. I realized that was okay.

How will you continue to bring poetry into your teaching? I’d like to do a whole course on poetry, to co-teach with someone from the English department. I need to forge the connections within the University. That’s what I look forward to in the next decade—solidifying my role as a link between design and the humanities.

It seems that being in the academic realm, you have to make an effort to cross-pollinate. Our college is full of people who cross-pollinate to all corners of our academic world. I feel that it’s about time I forged my own bridge, because it’s been there all along.

In the News, continued from page 5 the possibility that this common infection is spread by food. If that’s true, then this is a major public health issue.”

Peace and Well Being A new research center, housed in the Institute for Human Development, will explore peace and well being within the individual, between individuals, and in communities. Allison Briscoe, the center’s first graduate student fellow, developed a project to look at how family conversations about racism and prejudice impact peer relationships and academic performance in school. The center was created with a gift from Thomas and Ruth Ann Hornaday, who both attended UC Berkeley in the early 1960s. The center will offer research opportunities to undergraduate and graduate students and to non-tenured junior faculty members from the social-behavioral sciences.

Graduate Alum Delivers Charter Day Address A Berkeley Ph.D. from the Sixties helped the University celebrate its 134th anniversary at the Charter Day ceremony last March. Miguel A. Rodriguez, President of Costa Rica, received his Ph.D. in economics from Berkeley in 1966. For his keynote address, President Rodriguez spoke about trade and development in Latin America.

Spotlight on Public Health

Where can you find people studying the effects of aging, the medical issues of farm workers, and the cause of infectious disease under one roof? Look no farther than Warren Hall, headquarters of the School of Public Health. The school’s focus, however, extends far beyond its walls—to student health services, the streets of Oakland, and to families and communities around the world. The school’s varied public service efforts include breast cancer screening, HIV prevention programs, and studies on safety in the workplace. Its research brings faculty and graduate students together from many disciplines, which is why we chose to spotlight the school and to find out the meaning of public health. We begin with a conversation with Edward E. Penhoet, the outgoing dean.

A Dean’s Legacy:
Edward E. Penhoet Looks Back

Edward E. Penhoet, Dean of the School of Public Health since 1998, will leave this position on June 30, 2002. The co-founder, president and CEO of Chiron Corporation, Penhoet has a long history as an associate professor of biochemistry and will continue to teach after he steps down as dean.

During his tenure at the school, Penhoet launched the Health Sciences Initiative, which incorporates multiple fields in approaching health problems. Penhoet also worked to enhance the profile of the school, create community, and support faculty and research programs. He moves on to help lead the San Francisco-based Gordon and Betty Moore Foundation, which supports the environment, education, and science. We spoke with Edward Penhoet recently, and asked him to reflect on his years as dean.

How do you define public health?
Public health to me is a very broad term that encompasses all the various activities that are associated with people’s health, either at the personal level or at the societal level. My own bias is that the field is moving more towards thinking of populations both as collections of individuals and as groups of people. So, a bottoms up and top down approach to the field.

That seems to make sense, given that on the most basic level, people need to change their personal habits to improve their health.
Yes, if you consider the big public health problems today. Smoking, for one. How do you actually decrease smoking? Well, you can try to do it a lot of different ways. You can have campaigns, advertising, and you can have laws, which forbid smoking in public places. But you still have to convince people one at a time to stop smoking. So, you have to take individual action as well as collective action and that’s exactly what I mean by combining the two approaches. Obesity’s another area of concern. Twenty-five percent of Americans are obese. The U.S. Surgeon General says that obesity may surpass smoking as a general health threat for Americans. Again, we have to work on education, but we also have to work on...
changing individual eating and exercise habits if we're going to tackle the obesity problem.

**You come from a business background, as a co-founder of the biotechnology firm Chiron Corporation. What made you want to serve as the dean of the School of Public Health?**

First of all, I've been on the Berkeley campus, on and off, for 30 years. I was an assistant professor of biochemistry. My work involved trying to understand how viruses grow, how they replicate, and ultimately how they cause disease.

So, when I left the University to start Chiron, the major thrust of Chiron's program was in infectious disease. We worked on HIV, we worked on Hepatitis B, and we discovered Hepatitis C. So all these things were an outgrowth of my own interest in infectious diseases. And all of these things have important public health consequences. So, in a sense, I was in the public health business at Chiron. I actually decided to leave Chiron first, then I decided to apply for the job. When I heard the job was available, it seemed like a great fit. I had a long-time relationship with the campus, I was very interested in public health, and I had expertise in infectious disease. So, I applied for the job not knowing what being a dean is all about. I had a number of competitors. I was seen as a strange choice.

**Did your critics see a conflict in doing public-health work for profit?**

Yeah, probably. I gave a seminar during my interview for dean. I gave a talk on three things: the development of the hepatitis B vaccine, the discovery of hepatitis C and its use in blood screening, and viral load measurements. I thought this was pretty interesting stuff. I heard two students say, "Well, that was all very interesting but I don't see what that has to do with public health." So, there was an interesting period of time when people were quite uncertain of my motives. In the end, I got the job.

**Did your perspective change as dean?**

No doubt about it. I've been profoundly affected by the experience. I had to learn a lot about areas of public health where I had no personal experience. The furthest from my own experience is in community work, health and social behavior, and the sociological phenomena associated with health and health systems. It wasn't my area of expertise. I had a lot to learn.

**How did you get up to speed in areas you knew less about? Did you decide to steep yourself in the programs and then come up with goals for the school?**

In a sense, I had to learn on the job. I had to patch it together, do a lot of reading, go to seminars. I had several goals for the school. The most important goal was to make sure the school is better integrated into the campus. So, we have joint programs with the Haas Business School, the School of Public Policy, and the School of Social Welfare.

**Are these new partnerships?**

They were pre-existing. I tried to enhance them as much as possible. We started something on campus called the Health Sciences Initiative, which engages people from the natural sciences in health-related work in chemistry, physics, biology, and psychology. I think we've been pretty successful in making the school an important part of campus activities. Historically, the school had been somewhat isolated.

**Why is that?**

As we sit in this office (in Warren Hall), you see it faces out away from the campus, not onto the campus. That's a metaphor, in a sense, of the way the school saw itself in the past. So, one of my most important short-term objectives was to integrate the school much more effectively into the rest of the campus. I think today it's a huge advantage for the school. Most other public health schools are closely tied to medical schools. But if you look at what's driving health today, the business of health is extremely important, as is the technology of health, law related to health, and the public policy related to health. In my view, this is an ideal place to have a school for public health, because we have such a rich environment on the Berkeley campus, and all of these things are probably more important to the public's health than what goes on in medical schools today.

**What do you think is the biggest challenge facing the next dean?**

To continue the process of integration with the rest of campus and further strengthen the relationships with other units on campus is a big area of opportunity. Making decisions about focus within the school is another challenge. The school is too small to be all things to all people in health. The definition of public health I gave you is a broad one. There are some areas we just don't do. Maybe there are some areas we're doing now that we shouldn't be doing. There's a general agreement that we want to be the intellectual leaders of public health here. To do that, we need very high-quality students, high-quality programs, and high-quality facilities. But it's hard to do that if you're spread too thin.

**Any advice for the next dean?**

**Anything you wish you’d known when you came in?**

I think the University is really challenged now by financial constraints, even before the recent budget cuts. It hasn't been easy to carry out new programs here, because they're expensive. So, the fund-raising imperative is something to face squarely. We're becoming more and more a privatized university, because the state continues to give us less and less money. Try to realistically assess how much it takes to be leaders: it costs money. That's one issue. Another is to continue to build community within the school. When I first came to campus as an assistant professor, town and gown was a real thing. In today's world, 90 percent of our students are commuters. They don't live in Berkeley. They come to campus on BART. In many cases they can't afford to live in Berkeley.

**What accomplishment are you most proud of as dean?**

Without a doubt, better recognition for this school by the campus. And the initiation of the Health Sciences Initiative, with broad participation of almost 500 faculty. So hopefully that's my legacy, the most important thing by far.
Bringing Up Baby

By Claudine Zap

When Linda Neuhauser, principal investigator at the Center for Community Wellness, developed the first Wellness Guide in the 1980s, she thought it would be an instant success. After all, she was a professor who specialized in public health interventions. Before going to press, she decided to take the guide to the community for testing. She was in for a surprise. “We were really slapped,” remembers Neuhauser. “The community said it was academic, with stuff they couldn’t use. The solutions weren’t practical. The language and tone were condescending. We were totally humiliated.”

Back to Square One
At that point, she and others who had worked on the guide decided to start anew. Neuhauser and colleagues traveled throughout California and gathered ideas from all kinds of people on how to make a practical guide. They focused on groups of people who have less access to health-related materials, from farm workers in the Central Valley, to minorities in inner cities, to the elderly in isolated outposts. They discovered that most people wanted a wide-ranging guide that covered broad topics, from childcare to domestic violence. Neuhauser used the feedback to begin to create a more comprehensive guide. Now in its tenth edition, the Wellness Guide is distributed to one million people throughout California.

A New Guide for Parents
The success of the Wellness Guide prompted the California Children and Families Commission to ask Neuhauser to create a guide for new parents. Taking lessons she’d learned from the Wellness Guide, she conceived a “baby kit.” A brightly colored box, the Kit for New Parents opens up to reveal a written guide, a book for baby, and several brochures on parenting, along with six educational videos produced by Rob Reiner, chair of the California Children and Families Commission. (Reiner was recently honored by the School of Public Health. See page 12.) Neuhauser hopes that the variety of material will engage parents in whatever medium makes them most comfortable. The baby kit is distributed through hospitals, doctors’ offices, prenatal programs, childcare centers, and the like.

“Parents often say they wish the baby came with an operation manual. So, this is it.”

Linda Neuhauser, Principal Investigator, Center for Community Wellness

The trial group of parents received kits and was surveyed six weeks later. This time, “knowledge skyrocketed,” Neuhauser says. The results were so positive that a decision was made to distribute the baby kit to new parents in California, as well as those in several other states. The kits are available in either English or Spanish. Neuhauser has already heard about instances in which the baby kit has saved lives. In one case, a woman was given the kit and learned that shaking a baby can cause death or blindness. She was able to alert her neighbor, a teenage mother, who had believed that shaking her baby would strengthen its neck. In another case, a parent was able to save his child from choking to death, based on information he had read in the kit.

Neuhauser’s latest projects will follow her grass roots approach. The first is a guide to help people navigate through California HMOs. The second is a guide to encourage members of underrepresented groups to attend college. “It shows that the University can connect well with the community, apply the best science, and have an impact,” says Neuhauser. “The key is that the beneficiaries have to be involved.”
A Knight’s Tale
Sir Michael Marmot on Inequalities in Health

Sir Michael Marmot, international public health specialist, was invited to Berkeley in February 2002 to deliver the Charles M. and Martha Hitchcock Lectures. Marmot spoke on two afternoons about his long-term research of British civil servants, the Whitehall II Study. In the study, Marmot evaluated patterns of disease based on where people stood on what he calls “the social gradient.” This research led to Marmot being knighted by the Queen in a ceremony that included actors Sean Connery and Elizabeth Taylor, he noted.

Leonard Syme, Professor of Epidemiology, emeritus, introduced Marmot to his Berkeley audience as “a trouble maker” for asking so many questions during his days as a student. But, Syme added, Marmot’s questions led to groundbreaking research. “Marmot’s work with the British civil service changed everything,” explained Syme. “The demonstration of a gradient of disease suggests that even people higher up in social classes have higher rates of disease than those above them. This observation of a gradient has been demonstrated in all industrial countries of the world for virtually all diseases. So now we can think about factors that would explain the gradient.”

Marmot, who heads the Department of Epidemiology and Public Health and is Director of the International Center for Health and Society at University College, London, received his Ph.D. from the Berkeley School of Public Health in 1975. When he published the results of his study, he caused a stir in Britain, as his research compared the social behavior and health of British civil servants to those of primates. “The press had a field day,” he notes.

We spoke with Sir Michael Marmot during his stay at Berkeley and asked about his move from medical school to public health and the implications of his research.

You’ve said you came to the School of Public Health after being frustrated with the constraints of medical school. Are schools of public health and medical schools mutually exclusive? Is this a problem?
When I trained in a medical school, the impact of public health on the teaching was trivial—it almost didn’t exist. Working in a medical school now, I think that attitudes are changing, a bit. I mean it’s still the case that the center of gravity of a medical school is with basic biological sciences. Dealing with populations just doesn’t fit with how most medical schools define their mission. So a medical school is in some sense a slightly unusual home, but the advantage of being there is what we’re trying to do—to link what’s happening at the societal level to what’s happening to people’s biology.

Is this a successful linkage?
It’s difficult. It’s not straightforward. We’ve had some impact. They do recognize that what we do is important, even if we don’t quite relate to their research. They do recognize that what we do fits with what more basic scientists do.

Your study evaluates the state of one’s health based on social class. In the U.S. we like to think of ourselves as being a classless society. Does that change how we read the results of your Britain-based study?
I think it is very directly applicable. There are differences between Britain and the US but one shouldn’t overstate the differences. There’s more mobility in the U.S., but there’s a fair degree of mobility in Britain. In Britain, we know we have social classes. We acknowledge them. And we see a big difference between them. The American image is that you don’t have social classes, nothing is rigid, everything is possible, but in fact you have clear differences between social-economic groups, and that translates into clear differences in health between social-economic groups.

Some find your conclusions controversial.
People are confronted by it for a number of reasons. It may be shocking socially and politically, but not intellectually, that poor people have worse health than rich people do. A bigger shock is that there’s a social gradient. My summary, in a way, is that where we’re above an absolute threshold of deprivation—infestations, dirty water, malnutrition and so on—what characterizes people’s position on the gradient is how much control people have over their lives and to what degree they can participate in society. That control can relate to stress pathways. People who aren’t able to participate fully, who have a subordinate position in society get the same biological effect as animals in similar positions do. It increases risk of disease.

I have this sad image of very marginalized people.
It’s sad because of the plight. But it’s hopeful because I think there are things we can do if we have the will to try. And I think that’s terribly important. But it’s not up to the (marginalized) individual to try. It’s up to us to push the community, local government, regional government, central government, the private sector, and voluntary agencies to try. I think things can change.

“it may be shocking socially and politically, but not intellectually, that poor people have worse health than rich people do.”
Sir Michael Marmot

Photo courtesy of Sir Michael Marmot.

By Claudine Zap
Fit News to Print

By Claudine Zap

Did you know that apples and pears can reduce the risk of lung disease—women are 33 percent more likely than men to visit a doctor—and weight gain and too little exercise are big risk factors for cancer? These are just a few of the fascinating tidbits packed into the UC Berkeley Wellness Letter, a monthly publication distributed nationwide.

Dale Ogar, managing editor, says the focus of the Wellness Letter is on prevention. “The phrase that best describes us is health promotion and disease prevention. Our goal is to empower readers to make healthy lifestyle choices.”

Articles in the Wellness Letter touch on nutrition, stress, exercise, and general health and safety issues such as cars and guns, “anything that falls within the realm of public health,” says Ogar. Ideas are generated through the editorial board at Berkeley, many coming from the daily press and questions from readers. “When we suddenly get 20 requests for a topic within a single month, we know it’s something we should cover,” says Ogar. Readers are especially concerned with dietary supplements, and in fact, the Wellness Letter has compiled a list of them on its Web site (www.wellnessletter.com), with the actual benefits, if any, alongside the claims.

Another concern is nutrition. The Wellness Letter eschews fad diets—as well as the books that promote them. The Wellness Letter advocates common sense. “We want to tell people that all these high-protein, high-fat, no carb diets come from a physiological, biochemical point of view that makes no sense at all. The reason you’re losing weight is that the diets are lower in calories,” says Ogar, adding, “Carbs are important, especially whole grains.”

Since the newsletter comes out monthly, there’s time to research topics in depth for readers who see headlines trumpeting several studies that seem to conflict with one another. Says Ogar, “What we do is to not only look at a break-through study but to look at everything that came before it, to see if it makes sense.” One example is a story on Hormone Replacement Therapy (HRT), a treatment of estrogen and progestin, often prescribed by doctors to ease the symptoms of menopause.

According to Ogar, the research took six months. “The whole issue of who should use HRT and who shouldn’t is very controversial,” Ogar explains. In the end, the article makes no definitive recommendation. “This is a decision.”

See Fit News, page 16

Berkeley Honors Public Health Heroes

Advocates for the poor and isolated, the elderly, and the young were among the Public Health Heroes honored in March by the School of Public Health.

The School of Public Health’s Advisory Council, a group of community, industry, and faculty leaders, selected three individuals and one organization from a list of nominees provided by the School of Public Health faculty, panel members, and previous award recipients.

The heroes honored this year:

• Zafrullah Chowdhury, for bringing health care to the underserved rural population in Bangladesh. The organization has since expanded to include agricultural cooperatives, women’s vocational training centers, and family planning services.

• Philip R. Lee, M.D., for his role in affecting U.S. health policy. An early supporter of Medicare, he also applied the Civil Rights Act to desegregate hospitals, and helped establish the National Center for Health Services Research.

• Rob Reiner, for shining the spotlight on early developmental years of a child. Reiner, a successful movie director and actor, led the effort to pass Proposition 10 in California, the initiative that levied a 50-cent tax on cigarettes to fund early childhood development programs. Reiner chairs the California Children and Families Commission, which oversees the Proposition 10 funds.

• On Lok, a San Francisco-based non-profit organization established in 1971, for providing the elderly with quality, affordable care services.

Source: UC Berkeley Office of Public Affairs
Kathleen Jones-West Shares Her Life Lessons

When Kathleen Jones-West was a teenager, watching the news on TV, she saw activists at Berkeley making headlines, and thought, “Wow, that’s really cool. I want to go there.” Yet, she couldn’t imagine then how the fantasy would someday become a reality. “I never thought I was capable of coming here,” says Jones-West, sitting at a table on the deck of the Cesar Chavez Student Center, not far from the site of the televised protests. “I didn’t know that I had what it took.” Jones-West not only accomplished her goal of attending Berkeley, she earned her undergraduate degree, went on to graduate school, and also started a program to help more people like her come here.

Jones-West took the traditional route of going straight to college after high school. Partway through her first semester at Cal Poly, her father died. She left school and didn’t return. “I went back home to help my mom and kind of got lost,” Jones-West explains. “It took me awhile to get back on track. It was difficult to do, but I did it.” One of the challenges she faced was her limited skill level. Initially, she wanted to gain computer skills so she could earn a better salary at her secretarial job. Her need for career advancement grew when her husband fell ill after an epileptic seizure. She soon became the sole wage earner, supporting her husband, two sons, and herself. Unable to pay the medical bills, she applied for Medi-Cal, which she recalls as a demeaning experience. “There’s a stigma that goes with it,” she says. “The government doesn’t really take into account that people are asking for these services through no fault of their own.”

Back to School
Feeling unfulfilled in her low-level, low-paying job, Jones-West concluded that higher education was her only way out. She told her mother, her husband, and her kids about her plans for college. “They thought I was joking,” says Jones-West. “They didn’t take me seriously.” Jones-West wasn’t deterred. Twenty years after finishing high school, she enrolled at Vista Community College in Berkeley, where she earned an associate degree. Flush with her educational victory, Jones-West didn’t intend to stop there. “I didn’t want to become a computer nerd,” she says. “I wanted to help people do what I had done.” She began to set her sights on Berkeley, just a few blocks up the street, but a world apart. She confided her goal to her counselor at Vista, who only discouraged her from applying to Berkeley, saying she wasn’t a scholar. “I thought, well, how does this guy know I’m not a scholar? I don’t know that,” says Jones-West. Disregarding his advice, she applied anyway, and got in.

Upon entering Berkeley, Jones-West discovered that she had been awarded the George A. Miller scholarship for low-income, first-generation college students. One of the scholarship’s conditions was that she perform community service. “I was going to East Oakland to help the most devastated folks I could find,” recalls Jones-West. “I had a professor tell me, ‘Don’t do that. You don’t have to go very far to find people who need help. You can go two steps off campus and still have plenty of people to help.’ That was the best advice I could have been given.”

Reaching Out
Instead of East Oakland, Jones-West returned to Vista Community College and spent the summer helping 19 enthused students apply to Berkeley, assisting them with financial aid forms, filling academic requirements, and offering tours of the campus. At summer’s end, the students wanted the mentoring to continue. “I couldn’t just go back to school and leave them again,” says Jones-West. “I felt responsible.” She also knew that applying to Berkeley was a realistic goal. “I had left behind my colleagues at the junior college who maybe didn’t have the confidence or courage to apply,” Jones-West says, “But they certainly had the intellect.” So she offered a class through De-Cal—courses conceived and taught by students—that connected Berkeley and Vista. She called the class Starting Point.

“I was able to attract Berkeley students who were eager to help,” says Jones-West. “They realized what it had taken for them to get here, and they wanted to help people in the same way. They came from all racial and financial backgrounds, all disciplines.” Jones-West replicated her summer project by pairing Vista students with Berkeley student mentors.
By Claudine Zap

Ben Gardner first became fascinated with East Africa during his undergraduate years. In 1991, the anthropology major cobbled together two semester-long programs to spend his entire junior year in the region—first a semester in Kenya, and then a semester in the neighboring country of Tanzania. He says, “I was enthralled with the countries—by all the complex social, cultural, and political issues that were going on.”

Gardner, now a doctoral student in geography, had a chance to witness all of those issues at play on the border of Kenya and Tanzania. He worked with a local non-government organization (NGO), just outside a national park, where interests clashed between tourism outfits, conservationists, and semi-nomadic peoples. “Part of the conflict,” says Gardner, “is groups trying to find ways to encompass everyone’s interest.” He adds, “It becomes a struggle for who controls more power, who can ultimately mobilize more resources.”

Out of Africa
Since his initial visit, Gardner has found ways to return to Tanzania, first as an organizer of trips for high school students through Vermont-based Putney Student Travel. He eventually helped establish an NGO called the Dorobo Fund, named for the ethnic group who live in the area. The fund is run by Tanzanians and helps local groups organize around natural resource rights. “Part of it is getting people involved in local decision-making and articulating local demands and engaging in these political processes,” says Gardner. The organization focuses on land issues in Northern Tanzania.

Gardner completed a master’s degree in 1998 at Yale University’s School of Forestry and Environmental Studies. However, says Gardner, that program was geared toward placing people as development professionals. He preferred to turn a critical eye on the field, which led him to Berkeley’s geography department for his Ph.D.

Gardner is studying political ecology within the department. “Geographers work on political economic analysis of social relationships, with an ecological understanding of resource use,” Gardner explains. “Berkeley is probably the center of this activity. The geography department is the center of that community.”

Tongue Tied
To truly understand the area he studied, Gardner needed fluency in the local language. So he applied for a Foreign Language and Area Studies (FLAS) Fellowship, sponsored by the Department of Education. “Language is the key to unlocking barriers,” says Gardner. “On one level, people see you’re committed to learning who they are and where they come from—that you’re really working hard to understand their language. At the same time, understanding what people are talking about, the metaphors, what’s being said and not being said, teaches you so much about what’s going on.”

Gardner had picked up a little Swahili from his multiple trips to Tanzania, but he had never had any formal training in the language. He decided to immerse himself in the language, to become as fluent as possible, and to maintain fluency through classes on campus. A Summer FLAS fellowship for intense language study over the summer provided the way. Gardner studied under Hemed Almawi, who aside from teaching students, also served as the Swahili instructor for the International Criminal Tribunal for Rwanda, based in Arusha. Gardner lived with a local family and studied Swahili six hours a day, six days a week, for six weeks. After returning to Berkeley in the fall, Gardner received a yearlong FLAS to continue his study, accessing resources on campus.

According to Gardner, Swahili has its roots as a trading language between East Africans and Arab merchants who came down the coast. It is a Bantu-structured language, meaning it is based on Bantu with some Arabic words mixed in. The coast, sometimes called the “birthplace of Swahili,” is where the best Swahili is spoken, says Gardner. He explains that most everywhere else people have their mother tongue and learn Swahili later in life. On the coast, Swahili is the primary language spoken, whereas many ethnic languages are spoken inland. Swahili is the official language, used in schools and government offices to maintain some sense of national unity.

“In Tanzania, you need to know Swahili to communicate,” says Gardner. “In less urban areas, I can speak Swahili to anyone who’s gone to school.” Gardner also would like to learn Maa, the language spoken by the ethnic group he works with in Tanzania, the Maasai.

Gardner keeps up his Swahili studies at Berkeley by writing papers and short essays, reading, and practicing conversation and advanced grammar. One of the books Gardner uses is an elementary-school textbook called, “Sameni Bila Shida,” which translates to, “Study Without Problems.” With the knowledge of the language, Gardner can also better grasp the culture of the country. One of his favorite phrases from Tanzania is, “Haraka haraka hiana baraka.” In English this means, “If you rush too much, you won’t succeed.” When it comes to language acquisition, Gardner thinks this is the right attitude to adopt. “If you’re talking to people at all,” says Gardner. “You’ve got to know the local language.”
Foreign Language and Area Studies (FLAS) Fellowships

Need to sharpen your language skills for help with your Ph.D. research? Consider applying for a Foreign Language and Area Studies (FLAS) Fellowship. Sponsored by the Department of Education, FLAS fosters national competence in modern foreign languages and expertise in area and international studies. Fellowships are available for language study in eight world areas: Africa, East Asia, East Europe, Latin America, Middle East, South Asia, Southeast Asia, and West Europe. Last year, 205 people applied and 55 were awarded the fellowship.

FLAS Fellowships for 2002-2003 cover fees and tuition, and provide a stipend (supplemented by the Graduate Division) of $12,000. Past FLAS recipients may apply for subsequent years of funding.

Summer FLAS Fellowships provide intense language study equivalent to one year. Awards cover $3,600 in registration fees and provide a stipend of $2,400.

Student Affairs Officer Gina Farales, who coordinates the fellowship, says, “The FLAS is a wonderful fellowship. We encourage students with an interest and need for a language to apply for this fellowship.”

Continuing students may apply by downloading the FLAS form from the Web (www.grad.berkeley.edu/fellowships/). Or, you may pick up FLAS applications in the Graduate Fellowships Office, 318 Sproul Hall. For more information, call (510) 642-0672.

Janes-West, continued from page 13

Helen Johnson, director of the Centers for Transfer, Re-entry, and Student Parents, hired Jones-West and helped her prepare for her De-Cal class. Johnson says that outreach focused on community colleges makes sense, since most re-entry students come from that background. She credits Jones-West for jump-starting the outreach program with Vista, saying, “she wasn’t encouraged to come here. As a person of color, she wanted to make sure that outreach was available to more students there. That was the genesis of Starting Point.” The class was so successful that the Re-entry Center institutionalized Starting Point as a program and hired Jones-West to run it. So far, 19 Vista students have been accepted for admission to Berkeley.

As an undergraduate, Jones-West noticed another outreach gap: a resource for students on welfare. Remembering her own traumatic experience, Jones-West, now a graduate student at the School for Social Welfare, developed a De-Cal class last semester called Welfare Reform and Higher Education. Says Jones-West, “I knew something about it, because I had been part of the system and tried to raise above it and did. I saw a lot of other women who were struggling, capable women who were not given a chance.”

Jones-West provided students with the information needed to navigate through California’s welfare system, either as a professional social service worker, or as a recipient. Her class was filled to capacity. She also offered a forum on the complexities of the law to allow students to relate their personal experiences. Students in the class learned about TANF—Temporary Aid to Needy Families—a welfare reform act passed in 1996, which gives recipients a lifetime maximum of five years to receive aid. The law was up for reauthorization this spring, and the Health and Human Services department wanted feedback on how it is working. Jones-West made sure they got some. She asked students to submit their feedback to Congress as their final exam.

Later this spring, Jones-West will receive her graduate degree from the School of Social Welfare. Starting Point, the program developed from her community service, has expanded to other community colleges in the Bay Area. Drawing from her success at Berkeley, Jones-West says, “I realize that if people get the resources they need, there’s no limit to what they can do.”

Resources for Transfer, Re-entry, and Student Parents

About eight percent of the student population at Berkeley is made up of transfer, re-entry, and student parents, who experience life a bit differently than others on campus. Recognizing this, the University now offers services uniquely suited to these students. Says Helen Johnson, director of the Centers for Transfer, Re-Entry, and Student Parents, “We care about you. We want to help you be successful here. That’s our mission.” Located in the Cesar Chavez Student Center in Lower Sproul Plaza, services include student lounges, a study center, and all kinds of classes and resources for your transition back to school.

Transfer Students
Discover academic support systems, advising, and resources on campus and in the community. Call (510) 642-4257 or visit the Web (http://transfer.berkeley.edu/).

Re-entry Students
The Center offers a variety of ways to ease your way into the classroom. Workshops are available on writing, study skills, and tutoring. Call (510) 643-8070 or visit the Web site (http://reentry.berkeley.edu/).

Student Parents
Meet other student parents at Berkeley and find out about student-parent orientations, childcare, and family housing. Call (510) 643-5729 or visit the Web site (http://studentparents.berkeley.edu/).
organized. It is rare to find all of these qualities in one person.”

Smolke is currently completing a postdoctoral appointment, working with Professor Karsten Weis in the Department of Molecular and Cell Biology. Using yeast cells, they study macromolecular transport into and out of the nucleus in eukaryotic cells.

“My adviser was really good about making sure that I went to conferences and meetings, making sure that I was able to present my work.”

Christina Smolke, Berkeley Ph.D. and Postdoc

At Michigan, Smolke will focus on biomolecular engineering, therapeutic molecule design, and metabolic engineering, research that she hopes will improve gene therapy and develop better methods to diagnose and treat cancer and many other diseases.

“I would like some of my future research to be targeted for medical applications,” she explains.

It Was a Very Good Year
Success in the academic job market is largely dependent on one’s area of research and whether universities are targeting specific areas. Smolke’s research in biological research systems brought her numerous job offers.

Her department did a great job, she says, with keeping her visible and on track before and during the job search. “I had an excellent experience in the Department of Chemical Engineering,” says Smolke. “My adviser was really good about making sure that I went to conferences and meetings, making sure that I was able to present my work.” She adds, “It’s important that department heads see you over several years, see you presenting your work, so when they see your application they can put a face to the name.”

Smolke interviewed at 14 universities. She narrowed her list based on the quality of the university, the department, the people in the department, and her interactions with them. The schools she wound up considering most seriously were the Universities of Washington, Colorado, Illinois, and Michigan. In the end, she chose Michigan, which reminds her of Berkeley.

“Ann Arbor is a college town, with little communities, little neighborhoods,” says Smolke. “I could see myself living there, raising a family there.”

A Class Act
One of the reasons that Smolke wanted to go into academia was to be able to control her own research. Equally important was her desire to teach.

“A great teacher makes all the difference in the world,” says Smolke. “I always appreciate professors who put energy and effort into teaching.”

By no means does she think teaching is easy, though, and she admits to being surprised and honored when she received the Outstanding Graduate Student Instructor Award in 1999. “I’ve taught three times here and I’ve definitely gotten better at it as I’ve gone along. But I still find it challenging.”

Her work as a GSI for Professor Jeffrey A. Reimer’s Separations Processes course in spring 2000 earned her a second teaching award, the Dow Prize for Excellence in Teaching.

“What distinguishes Christina’s teaching from her peers is the deliberateness with which she crafts course material, whether in lecture format or in discussions or tutorials,” says Reimer. “Christina’s intellectual and pedagogical craftsmanship helped propel the course to extremely high standards.”

So how does this super achiever remain so grounded?

Smolke credits her parents and their support—staying up late to read her papers, hanging out with her and watching wrestling on TV (she’s an avid fan), and supporting her decision to become a professor and move halfway across the country (“which I know is hard for them”).

And 20 years from now, where will we find her?

“To dream big—on a beach in Costa Rica with Russell Crowe,” she muses.

“That’s a good question,” Smolke continues. “I’d consider myself lucky if I was in a place where I still felt excitement and happiness about waking up and going to work, sharing time with a friend doing something we love, or calling my mom to see how her day went and listening to the sound of her voice. It might sound mushy, but it doesn’t get much better than that...."